Customer No.: 31561
Docket No.: 10217-US-PA
Application No.: 10/707,608

REMARKS

Present Status of the Application

The Office Action rejected claims 1-22. Specifically, the Office Action rejected claims 1-22 under 35 U.S.C. 102(b), as being anticipated by Troutman (U.S. 6,157,356).

No claim is amended, and claims 1-22 remain pending in the present application, and reconsideration of those claims is respectfully requested.

Discussion of Office Action Rejections

Applicant respectfully traverses the 102(e) rejection of claims 1-22 because Troutman (U.S. 6,157,356) does not teach every element recited in these claims.

In order to properly anticipate Applicant's claimed invention under 35 U.S.C 102, each and every element of claim in issue must be found, "either expressly or inherently described, in a single prior art reference". "The identical invention must be shown in as complete details as is contained in the claim. Richardson v. Suzuki Motor Co., 868 F. 2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)." See M.P.E.P. 2131, 8th ed., 2001.

The present invention is in general related to an organic light-emitting display as claims 1, 12 and 18 recite:

Claim 1. An organic light-emitting display having a plurality of pixels and a plurality of external power lines, the organic light-emitting display being characterized in that:

each of the external power lines diverts into a plurality of internal power lines, and each internal power line is electrically connected to at least two of the pixels, wherein the internal power lines connected to different external power lines are separated.

Claim 12. An organic light-emitting display, comprising:

a pixel array having a plurality of data lines, a plurality of scan lines and a plurality of first and second pixels, wherein each of the first and second pixels is electrically connected to one of the scan lines and one of the data lines correspondingly;

a first external power line, ***dividing into a plurality of first internal power lines, wherein each first internal power line is electrically connected to at least two of the first pixels***;

a second external power line, ***dividing into a plurality of second internal power lines, wherein each second internal power line is electrically connected to at least two of the second pixels***, and the first internal power lines and the second internal power lines are separated; and

a power source electrically connected to the first and second external power lines.

Claim 18. An organic light-emitting display having a plurality of pixels in a matrix of columns and rows and a plurality of external power lines, the organic light-emitting display being characterized in that:

each of the external power lines diverts into a plurality of internal power lines, and the pixels in the same column or in the same row are separated into a plurality of groups and ***the pixels in each group are electrically connected to one of the internal power lines***, wherein the internal power lines electrically connected to the pixels in different groups are separated

Troutman fails to disclose, teach or suggest the feature of each of the external power lines diverts into a plurality of internal power lines. The Office Action points out that Vb in Fig. 1B of the citation is as the external power line of claim 1 and the lines within pixels in Fig. 1B of the citation are as the internal power line of claim 1. However, Applicant does not agree. In Fig. 1B of the citation, all the diodes are electrically connected to a voltage Vb, and the citation just discloses the bias voltage Vb is applied to all diodes (see col. 2, line 29). As a matter of fact, Troutman does not teach how the diodes are electrically connected to Vb (the circuit layout between the diodes and Vb).

In addition, the office action points out the lines within pixels in Fig. 1B of the citation are the internal power line of claim 1. However, there is not any internal power line in the pixels of Fig. 1B. Actually, the lines in the pixels are electrodes of a TFT or capacitor that are well known to the people skilled in the art. For example, as shown in Fig. 1A, the device 102 is a TFT, and the line connected to data line 112 drawn in Fig. 1A indicates a source electrode of the TFT 102, the line connected to the scan line 110

indicates a gate electrode, and the line connected to another TFT 106 indicates a drain electrode. The device 104 is a capacitor which is composed of a top electrode and a bottom electrode. Similarly, the TFT 106 is composed of a gate electrode, a source electrode and a drain electrode, wherein the gate electrode of TFT 106 is connected to the capacitor 104 and the drain of the TFT 102, and the drain of the TFT 106 is connected to the diode 108. In particular, one electrode of the diode 108 is electrically connected to Vb through a power line. The citation also teaches when the row line is activated, the TFT 102 is turn on and the voltage on the column line 112b is transferred to the capacitor 104 (see col. 2, lines 34-37). In the meanwhile, when the capacitance stored in the capacitor 104 reaches a threshold voltage, the TFT 106 is turn on. Then, the current from the power source Vb can be injected into the diode 108 through the power line between the diode 108 and Vb so as to emit light. Therefore, the lines in the pixel are electrodes of devices except the line connected between Vb and diode 108. There is not any ***internal power line*** in the pixel.

Applicant further explains the circuit diagrams of Fig. 1A and Fig. 1B of the citation are just normal OLED pixel circuits and the lines drawn in the pixels are electrodes of devices but not power lines. The following Fig. 1 is a circuit diagram of an OLED pixel array as the citation disclosed, and there is not any internal power line in the drawing. If the power lines are formed in the pixel array of the citation, the conventional power line layout is as shown in Fig 2. In particular, each of the internal power lines shown in Fig. 2 is not separated but continuous in each row or column.

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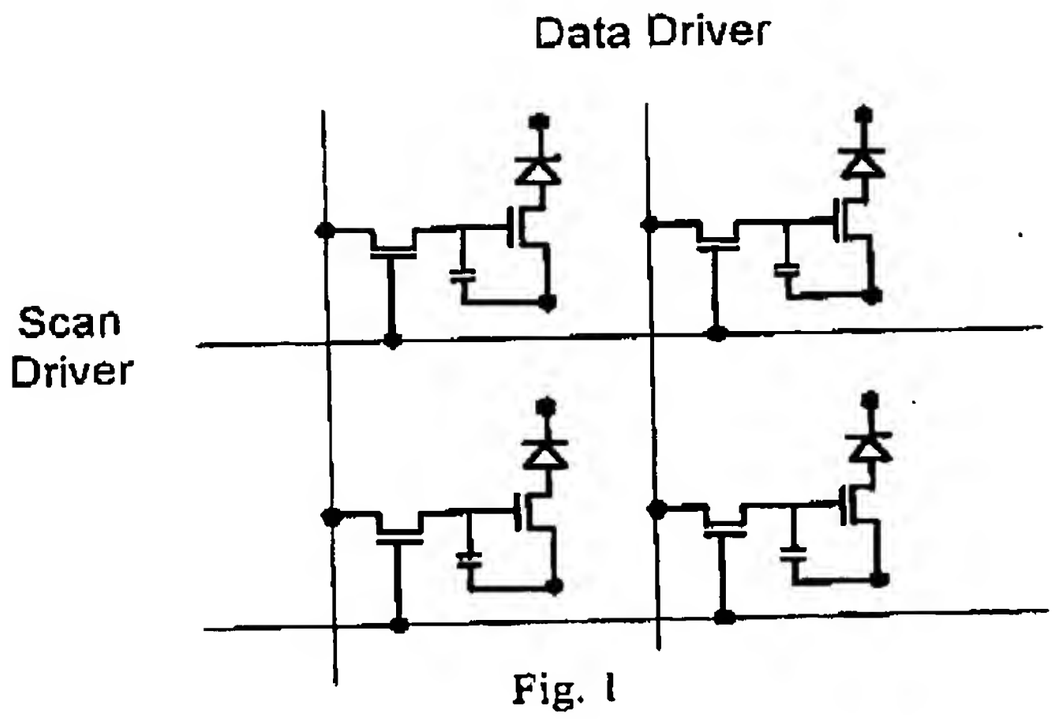

Fig. 1

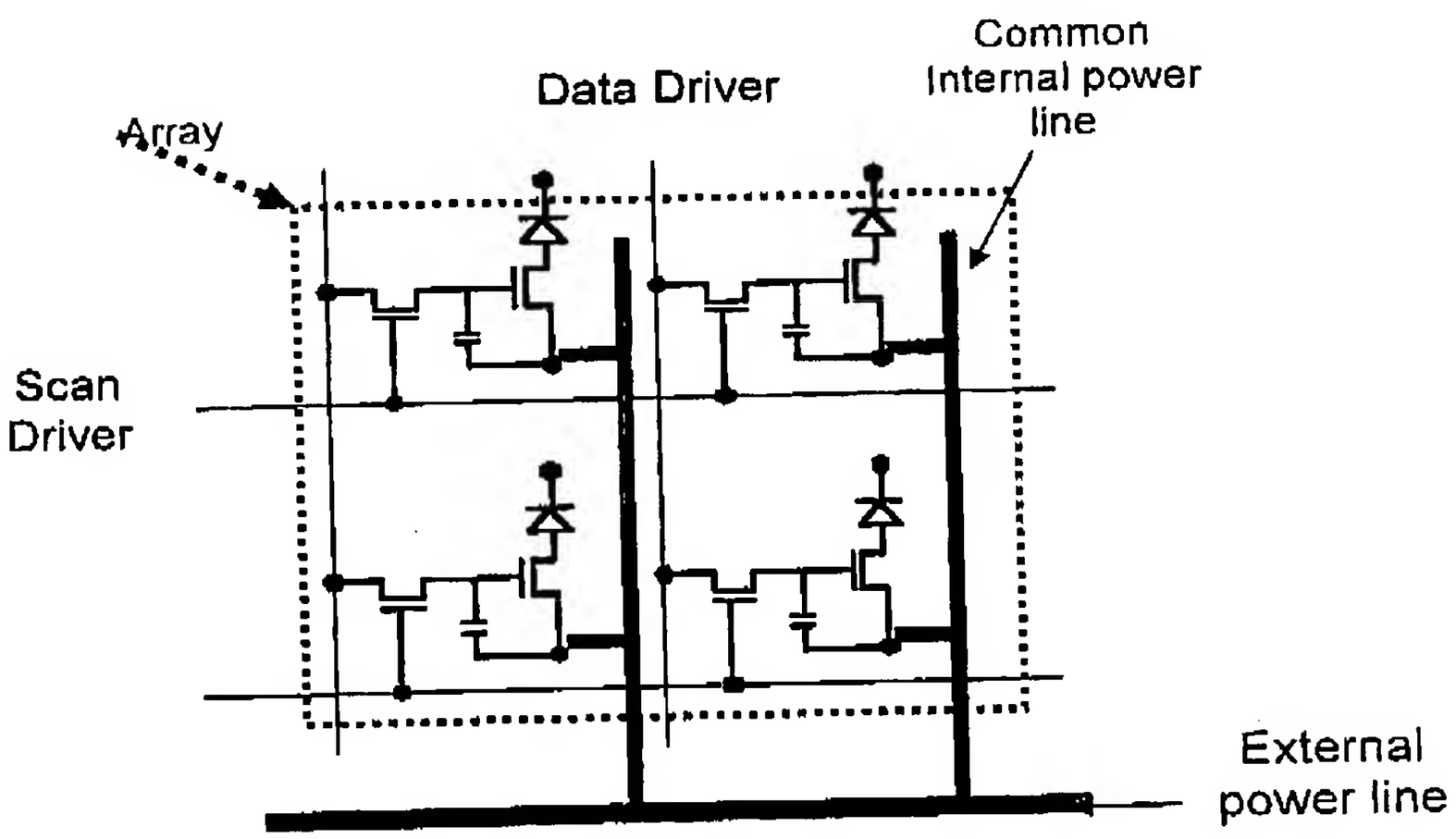

Fig. 2

However, the power line layout in Fig. 3, that is a circuit diagram showing the OLED device according to an embodiment of the present invention, ***the internal power lines connected to different external power lines are separated.***

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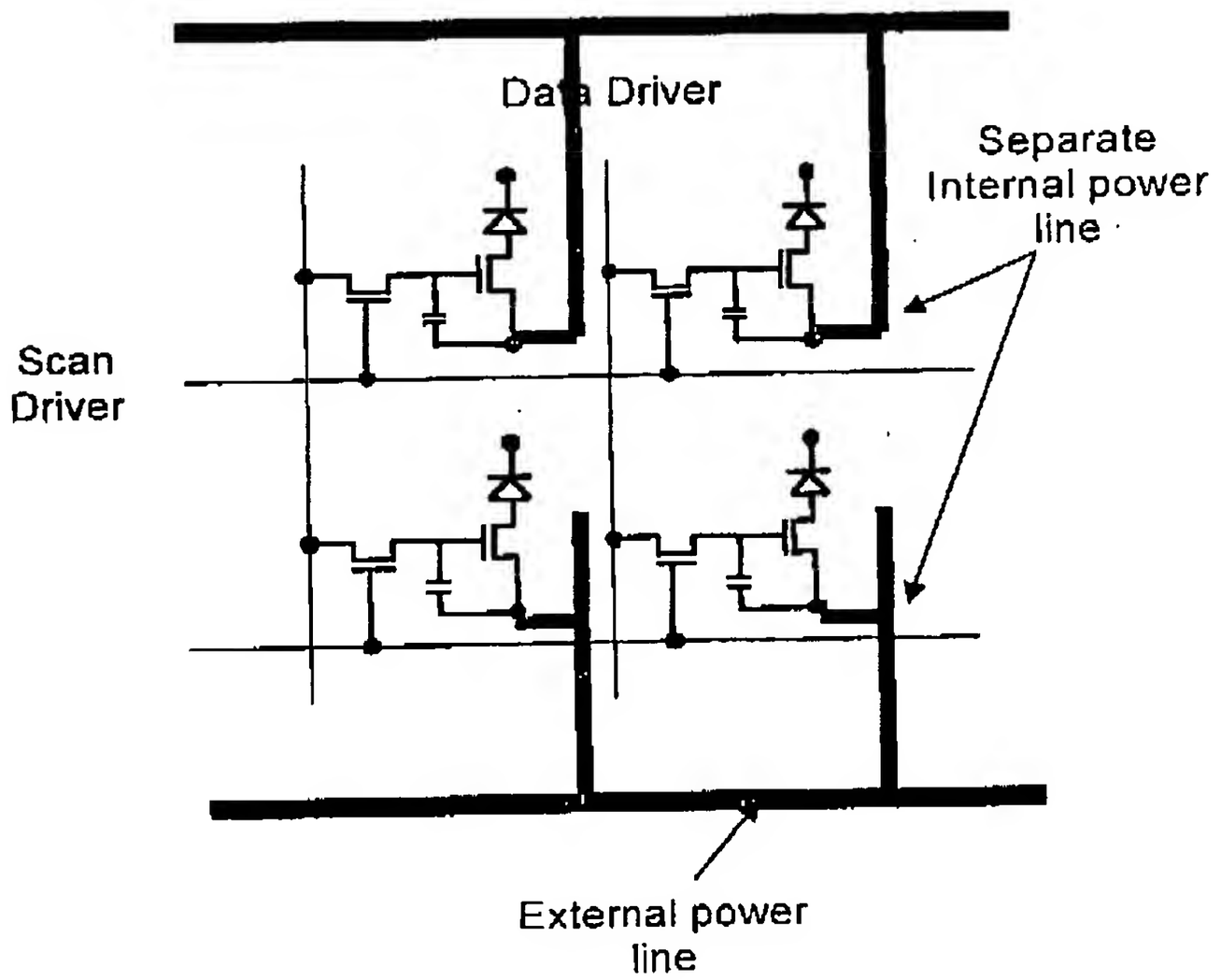

Fig. 3

Troutman fails to disclose, teach or suggest the feature of each of the external power lines diverts into a plurality of internal power lines, and the internal power lines connected to different external power lines are separated as claims 1, 12 and 18 recite.

Moreover, Troutman also fails to teach or suggest each internal power line is electrically connected to at least two of the pixels, and the internal power lines connected to different external power lines are separated. Because the element of

internal power lines is not disclosed in the citation, the relationship between the internal power lines and pixels is also failed to disclose in the citation.

Therefore, Troutman does not teach every element recited in claims 1, 12 and 18. For at least the foregoing reasons, Applicant respectfully submits that independent claims 1, 12 and 18 patently defines over the prior art reference, and should be allowed.

For at least the same reasons, dependent claims 2-11, 13-17 and 19-22 patently define over the prior art as a matter of law, for at least the reason that these dependent claims contain all features of their respective independent claim.

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CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

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